



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/797,710

03/10/2004

Katsuichi Osakabe

2552-000063

4255

27572 7590 08/31/2009
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

GRESY, ADAM

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

08/31/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,710	Applicant(s) OSAKABE ET AL.	
	Examiner ADAM R. GIESY	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1 and 15 are objected to because of the following informalities:

Examiner asserts that the phrase “the old user data” found in line 3 of claim 1 should be changed to read –the old data—in order to coincide with the recently submitted claim amendments filed on 10/3/2008.

Examiner asserts that the phrase “the select track” found in line 6 of claim 1 should be changed to read –the select tracks—.

Examiner asserts that the phrase “the reproduced old user data” found in line 4 of claim 15 should be changed to read –the reproduced old data—in order to coincide with the recently submitted claim amendments filed on 10/3/2008.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9, 12, 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Adachi (USPN 6876611).

Regarding claim 1, Adachi discloses an optical disk recording method comprising: deriving a recording condition of old data recorded on select tracks of a rewritable optical disk by reproducing the old data or from a reproduced waveform (see column 4, lines 52-53); deciding an overwriting recording condition to overwrite new data on the old data based on the recording condition of the old data (see column 4, lines 54-60); and overwriting the old data of the select track with the new data according to the decided overwriting recording condition (see column 4, lines 61-62).

Regarding claim 2, Adachi discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the recording condition of the old data is derived upon an instruction to overwrite the new data on old data recorded on the rewritable optical disk (see column 4, lines 38-63 – Examiner notes that the entire method is for determining the optimum writing power for minimizing jitter, thus since the recording condition of the test data is part of the method and the end result is recording data on the track, Examiner notes that the recording condition of the old data [test data] is inherently derived upon an instruction to overwrite that old [test] data).

Regarding claim 3, Adachi discloses an optical disk recording method comprising: detecting a crosstalk amount from a reproduced signal of old data recorded on a given track of a rewritable optical disk (see column 4, lines 52-53; see also column 5, lines 20-35 – especially note lines 30-35); setting a recording condition for new data based on the detected crosstalk amount (see column 4, lines 54-60; see also column 5, lines 20-35 – especially note lines 30-35); and overwriting the old data on the given track with the new data according to the recording condition (see column 4, lines 61-62).

Regarding claim 4, Adachi discloses all of the limitations of claim 3 as discussed in the claim 3 rejection above and further that the crosstalk amount is detected upon an instruction to overwrite the new data on old data recorded on the rewritable optical disk (see column 4, lines 38-63 and column 5, lines 20-35 – Examiner notes that the entire method is for determining the optimum writing power for minimizing jitter, thus since the recording condition of the test data is part of the method and the end result is recording data on the track, Examiner notes that the recording condition of the old data [test data] is inherently derived upon an instruction to overwrite that old [test] data).

Regarding claim 5, Adachi discloses all of the limitations of claim 3 as discussed in the claim 3 rejection above and further that the recording condition is set in response to a difference between the detected crosstalk amount and a reference crosstalk amount (see column 5, lines 20-35 – Examiner asserts that this can be read on by a reference crosstalk amount of zero. Adachi clearly states that the optimum recording conditions is for the crosstalk to equal zero).

Regarding claim 6, Adachi discloses all of the limitations of claim 5 as discussed in the claim 5 rejection above and further that an optimum recording power is decided by applying a trial writing onto a trial writing area of the rewritable optical disk, and the reference crosstalk amount is detected based on a reproduced signal of data that are recorded at the optimum recording power (see column 4, lines 38-63 – Examiner notes that the trial write area also happens to be a data area since the trial write track is overwritten with data).

Regarding claim 7, Adachi discloses an optical disk recording method comprising: acquiring a peak-to-peak value of a reproduced signal of old data recorded on a given track of a rewritable optical disk (see column 4, lines 52-53; see also Figure 6b, elements 24 and 25 – Examiner notes that even though Adachi refers to the values V10 and V11 as amplitudes, or the magnitude of the peak-to-peak, he is measuring the amplitude from the peak to the trough, which is a peak-to-peak value); setting a recording condition for new data based on the peak-to-peak value (see column 4, lines 54-60); and overwriting the old data on the given track with new data according to the recording condition (see column 4, lines 61-62).

Regarding claim 8, Adachi discloses all of the limitations of claim 7 as discussed in the claim 7 rejection above and further that the peak-to-peak value is acquired upon an instruction to overwrite the new data on old data recorded on the rewritable optical disk (see column 4, lines 38-63 – Examiner notes that the entire method is for determining the optimum writing power for minimizing jitter, thus since the recording condition of the test data is part of the method and the end result is recording data on the track, Examiner notes that the recording condition of the old data [test data] is inherently derived upon an instruction to overwrite that old [test] data).

Regarding claim 9, Adachi discloses all of the limitations of claim 7 as discussed in the claim 7 rejection above and further that an optimum recording power is decided by applying a trial writing onto a trial writing area of the rewritable optical disk, and the recording condition is set in response to a difference between the peak-to-peak value of the reproduced signal of data recorded at the optimum recording power and the peak-

Art Unit: 2627

to-peak value of the reproduced signal of the old data (see column 4, lines 38-63 – Examiner notes that the trial write area also happens to be a data area since the trial write track is overwritten with data).

Regarding claim 12, Adachi discloses an optical disk recording system comprising: a reproducing unit which reproduces data recorded on a given track of a rewritable optical disk (Figure 9, element 55); a crosstalk detecting unit which detects a crosstalk amount from a reproduced signal of the reproducing unit (49 and 50; see also column 13, lines 33-54); a recording-condition setting unit which sets a recording condition based on the crosstalk amount detected by the crosstalk detecting unit (Figure 6, element 46); and a recording unit which overwrites the data recorded on the given track with new data according to the recording condition set by the recording-condition setting unit (47 and 52).

Regarding claim 13, Adachi discloses an optical disk recording system comprising: a reproducing unit which reproduces data recorded on a given track of a rewritable optical disk (Figure 9, element 55); an envelope detecting unit which acquires a peak-to-peak value of a reproduced signal of the reproducing unit (49 and 50; see also column 13, lines 33-54); a recording-condition setting unit which sets a recording condition based on the peak-to-peak value acquired by the envelope detecting unit (Figure 6, element 46); and a recording unit which overwrites the data recorded of a given track with new data according to the recording condition set by the recording-condition setting unit (47 and 52).

Regarding claim 15, Adachi discloses an optical disk recording method comprising: deriving a recording condition of old data recorded on a given track of a rewritable optical disk by reproducing the old data and detecting a crosstalk amount from the reproduced old data (see column 4, lines 52-53); deciding an overwriting recording condition to overwrite new data on the old data recorded under the recording condition of the old data based on the detected crosstalk amount (see column 4, lines 54-60); and overwriting the old data on the given track with the new data according to the decided overwriting recording condition (see column 4, lines 61-62).

4. Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyashita et al. (hereinafter Miyashita – US Pat. No. 5,949,747).

Claims 10 and 11 are rejected for the same reasons as discussed in the previous Office Action, mailed on 4/1/2008 (see Response to Arguments below).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi (USPN 6876611) in view of Applicant Admitted Prior Art (hereinafter AAPA).

Regarding claim 14, Adachi discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above. Adachi does not disclose that the overwriting

Art Unit: 2627

of new data is performed by a different apparatus than the apparatus that wrote the old data.

AAPA (the unchallenged Examiner's Official Notice taken in the last office action) discloses that it was well known in the art of dynamic optical recording to manufacture an optical disc as disclosed by Miyashita in such a way that would allow the same optical disc to be written and rewritten to by multiple recording and re-recording apparatuses.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method of obtaining the optimum recording conditions from the detected crosstalk as disclosed by Adachi with the multiple drives writing to the same disc as disclosed by AAPA, the motivation being to allow for compatibility across rewritable disc types while lessening the effects of jitter on the disc as it is rewritten.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3, 7, 12, 13, and 15 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 10, Applicant argues that Miyashita does not disclose overwriting old data on the same track and states that the currently pending claims have been amended to require the old data and the new data to be on the same track. Examiner notes that no such limitation has been added to claim 10, and that claim 10 only requires data to be written into a trial writing 'area' which can be read to encompass many tracks or even sectors of an optical disc. Since this appears to be the only argument posed by Applicant with regard to claim 10 and the prior art of Miyashita,

Art Unit: 2627

Examiner considers this to be a complete response to that argument and upholds the previous rejection of claims 10 and 11 as previously discussed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Fuji et al. (USPN 6125085) discloses an optical recording method wherein optimum recording conditions are set based on the measurement of crosstalk on two adjacent tracks.

b. Satomura et al. (USPN 5485433) discloses measuring crosstalk in order to modify the recording characteristics of a magneto-optical media to lower jitter.

c. Oikawa (USPN 5644556) discloses measuring crosstalk in order to modify the recording characteristics for writing over old data.

d. Maekawa (USPN 7079460) discloses determining the optimum erase power in order to lower the jitter in an overwriting operation.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2627

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM R. GIESY whose telephone number is (571)272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 8/28/2009

/Adam R. Giesy/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627